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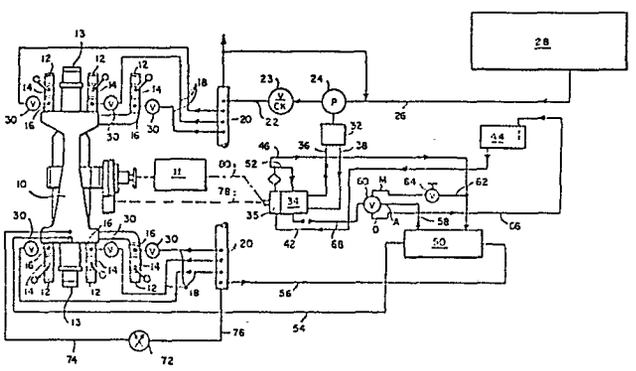
(54) Liquid supply system.

(57) A liquid supply system is disclosed for use with a motor-driven water pump (10) of the type having a plurality of outlets (12) through which water may be pumped. Each outlet (12) has a first valve (14) and a fluid pressure drop inducing device (16) associated therewith. Each first valve (14) is operable to open and close the respective outlet (12), and each pressure drop inducing device (16) is operable to admit a liquid additive into the respective outlet (12) at a flow rate which is directly proportional to the flow rate of the water being pumped therethrough when the respective first valve (12) is open. The supply system comprises a liquid additive storage tank (28), a liquid additive pump (24) connected respectively by suction and discharge conduits (26 and 22, 18) to the storage tank (28) and to each pressure drop inducing device (16). A respective second valve (30) is arranged in each discharge conduit (22, 18). Each second valve (30) is operable, when closed, to isolate the respective pressure drop inducing device (16) from the liquid additive pump (24). Each second valve (30) is also operable, when open to a selected setting, to meter the amount of liquid additive being supplied to said pressure drop inducing device (16). A variable output hydraulic drive means (32, 34) powers the liquid additive pump (24). A first control means (50), which is responsive to the water pressure developed by the water pump (10) and to the liquid additive pressure developed by the liquid additive pump (24), varies the power output of the hydraulic drive means (32, 34) in order to maintain the water pressure and the liquid additive pressure in balance irrespective of changes in water pump flow rate, water pump operating pressure, and the setting of the or each second valve (30).



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EUROPEAN SEARCH REPORT

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EP 83 30 3152

DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int. Cl. ³)
Y	US-A-3 047 003 (GURNEY) * The whole document *	1-3 5-10	A 62 C 5/02 A 62 C 35/44 B 05 B 7/32
Y	US-A-3 853 272 (DECKER et al.) * The whole document *	1-3 5-10	
A	US-A-3 980 230 (PRINGLE et al.) * Column 2, lines 33-40, 58-63; figure 2 *	1-3 6,8 10	
A	GB-A-1 169 178 (MERRY WEATHER & SONS LTD.) * Page 2, lines 5-15 *	1-3 6-10	
A	US-A-3 115 158 (SHEPPARD) * Column 1, lines 51-54 *	4,9	TECHNICAL FIELDS SEARCHED (Int. Cl. ³) A 62 C B 05 B B 04 F

The present search report has been drawn up for all claims

Place of search	Date of completion of the search	Examiner
THE HAGUE	10-01-1985	JUGUET

CATEGORY OF CITED DOCUMENTS

X : particularly relevant if taken alone
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